



# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service  
United States Department of Agriculture

JANUARY 7, 2003

<u>TM GRAIN TRANSPORT COST INDICATORS</u>	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Ocean</u>	
				<u>Gulf</u>	<u>PNW</u>
Indicator Value* for 01/07	101	106	89	115	139
Compared to Last Week	<b>up</b>	<b>down</b>	<b>unchanged</b>	<b>up</b>	<b>up</b>
*Indicator: Base Year 2000=100; Cost Data, Weekly Updates include Truck=Diesel, Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Ocean Vessel, based on Routes to Japan					

Jan. 12-16, '03	Transportation Research Board (TRB) 82 <sup>nd</sup> Annual Meeting	Washington, DC	202-334-2934 (ph) 202-334-2003 (fax) <a href="http://www.trb-agtrans.org/events.htm">www.trb-agtrans.org/events.htm</a>
Jan. 19-22	American Farm Bureau Federation (AFBF) 84 <sup>th</sup> Annual Meeting and Convention	Tampa Bay, FL	847-685-8600 (ph) 202-484-3600 (ph) <a href="http://www.fb.org">www.fb.org</a>
Jan. 26-31	Wheat Industry Conference	Albuquerque, NM	202-547-7800 (ph) <a href="mailto:wheatworld@wheatworld.org">wheatworld@wheatworld.org</a>
Feb. 5-7	National Grain Trade Council (NGTC) Transportation, Elevator & Grain Merchants (TEGMA) 2003 Annual Meeting	Marco Island, FL	Tyson Redpath 202-842-0400 Ext. 101(ph) 202-789-7223 (fax) <a href="mailto:redpath@ngtc.org">redpath@ngtc.org</a>
Feb. 9-12	U.S. Grains Council Annual Meeting	Guadalajara, MX	202-789-0789 (ph) <a href="mailto:grains@grains.org">grains@grains.org</a>
Feb. 11-13	World Ag Expo	Tulare, CA	614-292-4278 (ph)
Feb. 16-18	Annual Sorghum Industry Conference and 23 <sup>rd</sup> Biennial Research & Utilization Conf.	Albuquerque, NM	806-749-3478 (ph) <a href="mailto:conference@sorghumgrowers.com">conference@sorghumgrowers.com</a>
Feb. 20-21	USDA79 <sup>th</sup> Annual Agricultural Outlook Forum	Arlington, VA	202-314-3451 (ph) <a href="mailto:agforum@oce.usda.gov">agforum@oce.usda.gov</a>
Feb. 27-Mar. 1	Commodity Classic Trade Show	Charlotte, NC	Beth Musgrove 314-275-9915 (ph) <a href="mailto:musgrove@ncga.com">musgrove@ncga.com</a>
Mar. 10-12	American Farmland Trust National Conf.	Pacific Grove, CA	Doris Mittasch 413-589-9330 (ph) <a href="mailto:dmittasch@farmland.org">dmittasch@farmland.org</a>
Mar. 25-28	National Grain and Feed Association (NGFA) 107 <sup>th</sup> Annual Convention	Tucson, AZ	202-289-0873 (ph) 202-289-5388 (fax) <a href="mailto:ngfa@ngfa.org">ngfa@ngfa.org</a>
May 4-6	North American Rail Shippers Assoc. Annual Meeting	Washington, DC	202-639-2100 (ph)
May 5-7	American Feed Association Expo 2003	Minneapolis, MN	703-524-0810 (ph) <a href="mailto:afia@afia.org">afia@afia.org</a>

Report is prepared by Deen Olowolayemo, Hooshang Fazel, and Johnny Hill, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at [www.ams.usda.gov/tmd/grain.htm](http://www.ams.usda.gov/tmd/grain.htm). E-mail comments and questions to [Surajudeen.Olowolayemo@usda.gov](mailto:Surajudeen.Olowolayemo@usda.gov).

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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

**Market Update: U.S. Origins to Export Position Price Spreads**

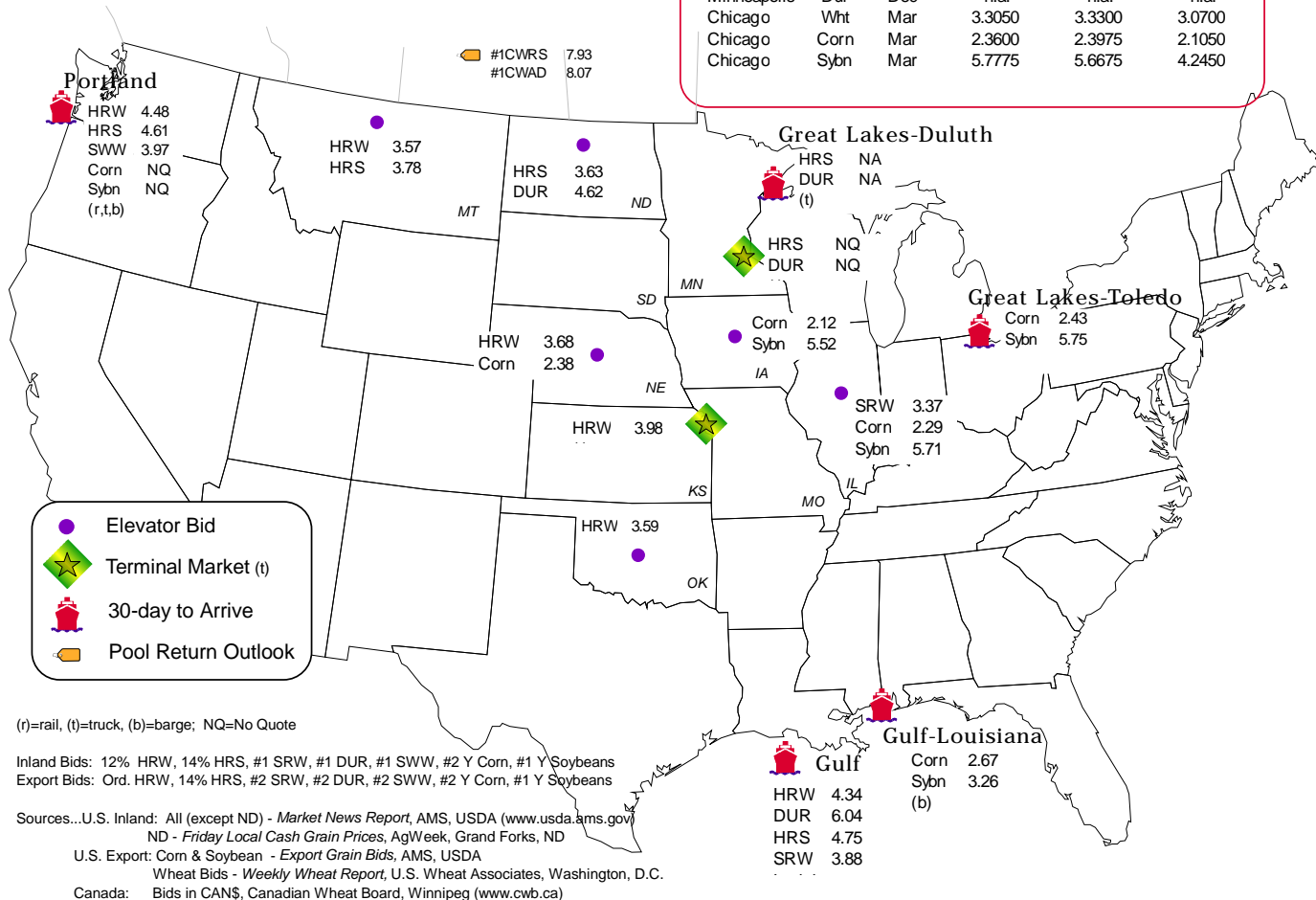
Per Bushel

Commodity	Origin--Destination	This week	Last week
Corn	IL -- Gulf	-0.38	-0.42
Corn	NE -- Gulf	-0.29	-0.35
Soybean	IA -- Gulf	-2.26	-0.71
HRW	KS -- Gulf	-0.36	-0.41
HRS	ND -- Portland	-0.98	-1.12

The **Grain Bid Summary** illustrates the market relationships for corn, soybeans, and five varieties of wheat among selected origins and destinations. Positive and negative adjustments in the differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

**Grain Bid Summary**

Futures:			01/03/2003	Week Ago 12/27/2002	Year Ago 01/04/2002
Kansas City	Wht	Mar	3.6750	3.7050	2.9100
Minneapolis	Wht	Mar	3.8075	3.8850	3.0750
Minneapolis	Dur	Dec	n.a.	n.a.	n.a.
Chicago	Wht	Mar	3.3050	3.3300	3.0700
Chicago	Corn	Mar	2.3600	2.3975	2.1050
Chicago	Sybn	Mar	5.7775	5.6675	4.2450



## RAIL TRANSPORTATION

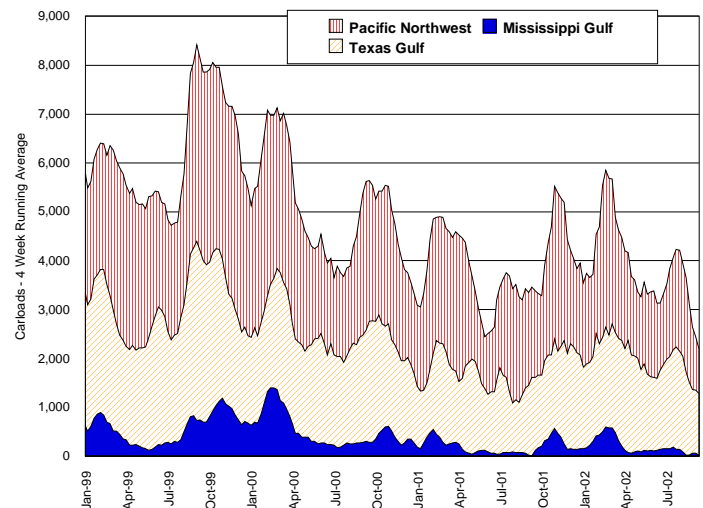
### Rail Deliveries to Port

Carloads

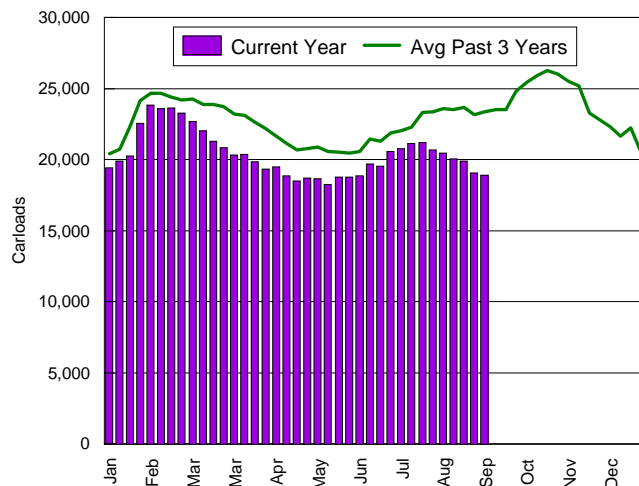
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
12/18/02	331	948	2,406	629	4,314
12/25/02	188	985	2,025	635	3,833
YTD 2002	11,112	83,584	111,719	21,406	227,821
YTD 2001	10,022	81,804	111,376	26,604	229,806
% YTD 2001	111%	102%	100%	80%	99%
Total 2001	10,022	81,804	111,376	26,604	229,806
Total 2000	25,767	104,473	128,414	14,816	273,470

Source: Transportation &amp; Marketing/AMS/USDA; (\*) Incomplete Data

### Rail Deliveries to Port



### Grain Car Loadings for Class I Railroads



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

### Class I Rail Carrier Grain Car Bulletin

Grain Carloads Originated and Grain Service Index

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
12/28/02	1,947	2,194	5,871	386	5,325	15,723	1,883	1,320
This Week Last Year	1,406	1,983	5,366	448	4,870	14,073	3,417	2,096
2002 YTD	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765
2001 YTD	151,864	163,018	428,603	26,330	347,156	1,116,971	254,982	232,461
% of Last Year	94%	101%	93%	103%	99%	97%	75%	84%
2001 Total	151,864	163,018	428,603	26,330	347,156	1,116,971	254,982	232,461

### U.S. Rail Carrier Grain Service Index\*

Nov-02	93.3	95.6	95.5	102.7	93.1	94.4
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Source: Association of American Railroads; \*Base Year =2001, Index based on Number of Covered Hopper Cars Online (available for Service) for Rail Carrier

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

**Railroad Car 'Auction' Results**

Average Premium/Discount to Tariff, \$/Car - Last Auction

Delivery for:	Jan-03	Feb-03	Mar-03
COT/N. Grain	\$0	no bid	no bid
COT/S. Grain	\$0	\$0	\$0
GCAS/Region 1	\$6	no offer	no offer
GCAS/Region 2	\$30	\$2	\$2

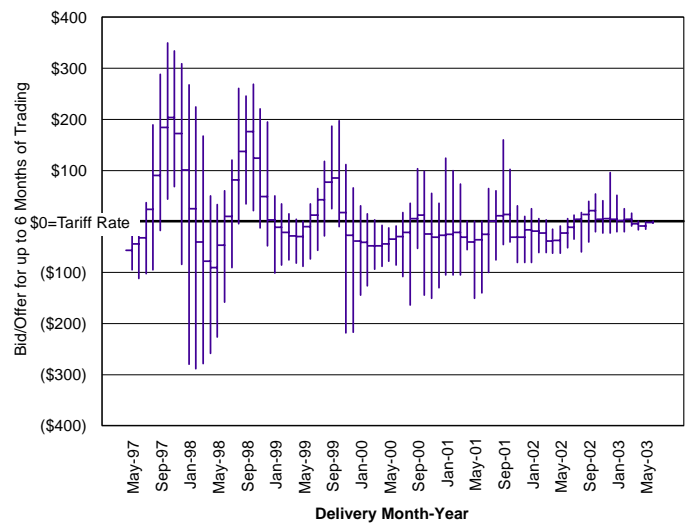
Source: Transportation &amp; Marketing/AMS/USDA.

(COT=Certificate of Transportation; GCAS=Grain Car Allocation System)

**Secondary Rail Car Market**

Average Premium/Discount to Tariff, \$/Car - Last Week

	Delivery Period			
	Jan-03	Feb-03	Mar-03	Apr-03
BNSF-GF	\$5	\$4	\$1	(\$8)
UP-Pool	\$51	\$26	\$15	(\$6)

**Secondary Rail Market Bid****Tariff Rail Rates for Unit Train Shipments**

December 2002

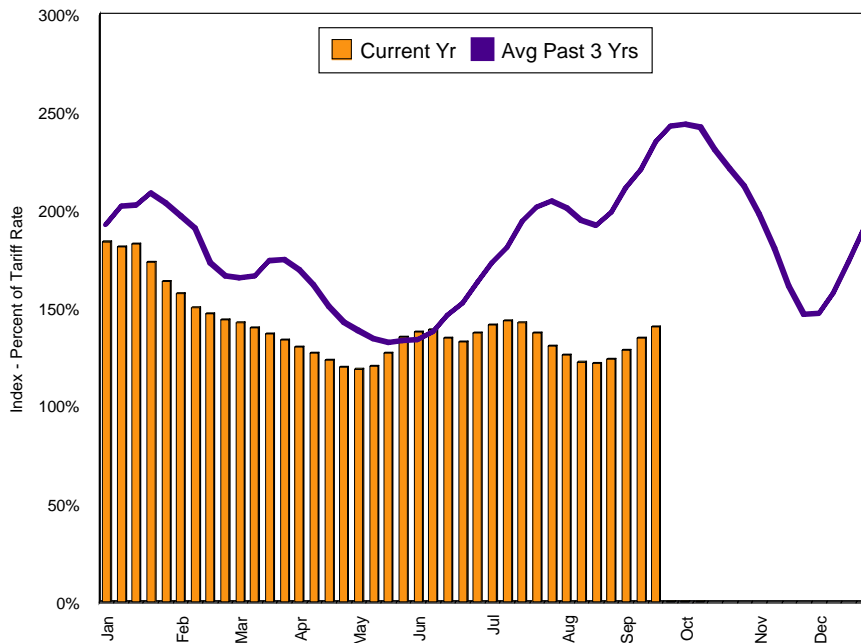
Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
12/2/02	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
12/02/02	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
12/02/02	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
12/02/02	43586	Wheat	Kansas City, MO	Portland, OR	\$4,347	\$47.92	\$1.30
12/02/02	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
12/02/02	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
12/02/02	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
12/02/02	31005	Corn	Omaha, NE	Portland, OR	\$2,850	\$31.42	\$0.80
12/02/02	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
12/02/02	61110	Soybean	Omaha, NE	Portland, OR	\$2,780	\$30.64	\$0.83

Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat &amp; Soybeans 60 lbs/bu

## BARGE TRANSPORTATION

**Illinois River Barge Rate Index - Rate Quotes**



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating barge rate per ton:  
 $\text{Index} \times 1976 \text{ Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

### BARGE RATE QUOTES: Southbound Barge Freight

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

	1/2/03	12/25/02	Feb. '03	Apr. '03
Twin Cities	nq	nq	nq	195
Mid-Mississippi	nq	nq	nq	169
Illinois River	160	166	176	155
St. Louis	136	136	138	134
Lower Ohio	128	129	130	134
Cairo-Memphis	118	121	121	125

Source: Transportation & Marketing /AMS/USDA; nq=no quote

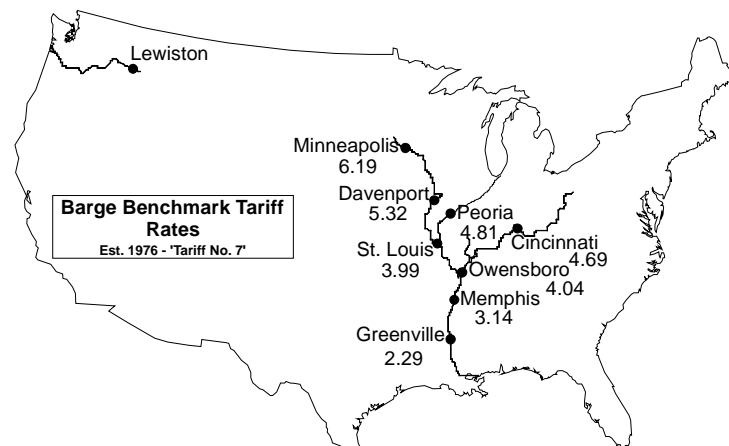
### BARGE FUTURES MARKET

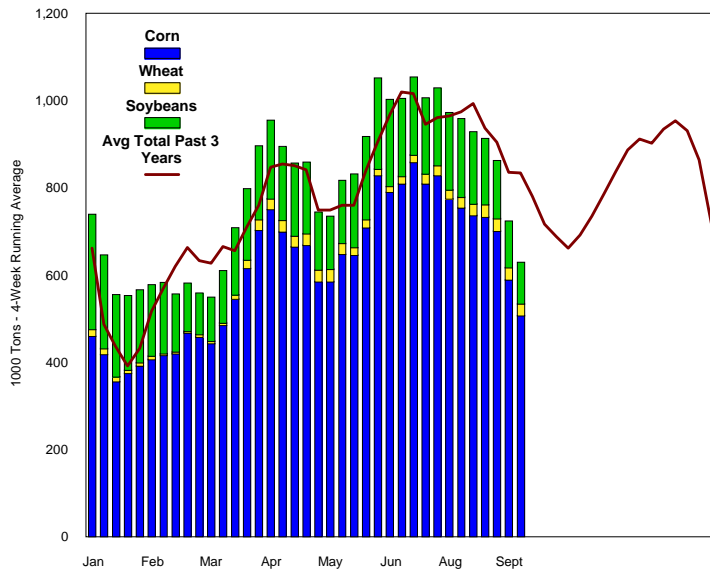
#### Southbound Barge Freight Nominal/Cash Basis Values

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Week ended	River/Region	Contract Period	Rate	
			Futures	Cash
1/7/03	St. Louis	Feb	n/a	140
		Apr	n/a	138
		Jun	n/a	140
		Jul	n/a	145
	Illinois River	Aug	n/a	150
		Feb	n/a	175
		Apr	n/a	150
		Jun	n/a	155
		Jul	n/a	160
		Aug	n/a	170

Source: St. Louis Merchants Exchange



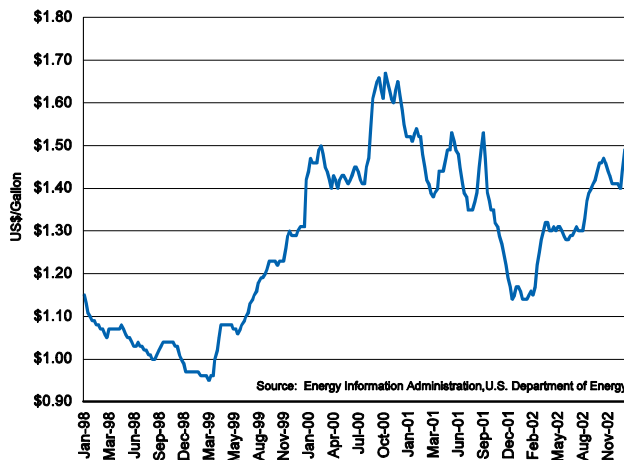
**Barge Movements on the Mississippi River (Lock 27)****Barge Grain Movements**

for week ending 12/28/02

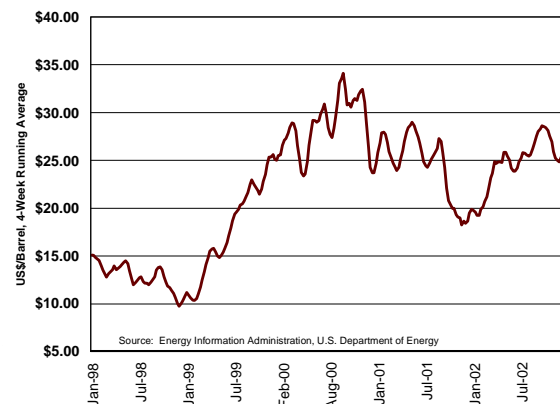
	Corn	Wht	Sybn	Total
	1,000 Tons			
Mississippi River				
Rock Island, IL (L15)	0	0	0	0
Winfield, MO (L25)	0	0	0	0
Alton, IL (L26)	489	10	116	624
Granite City, IL (L27)	450	8	103	562
Illinois River (L8)	482	16	121	627
Ohio River (L52)	31	5	17	90
Arkansas River (L1)	0	21	11	32
2002 YTD	35,066	2,590	11,634	50,810
2001 YTD	31,868	2,687	10,616	47,089
% of 2001 YTD	110%	96%	110%	108%
Total 2001	31,878	2,679	10,616	47,091

YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

Source: U.S. Army Corp of Engineers.

**TRUCK TRANSPORTATION****Weekly U.S. Retail Road Diesel Price**

The weekly **Diesel Price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

**Weekly Brent Crude Price, Friday Close****Crude Oil Prices**

US\$ per Barrel	This Week	Last Week
Light Sweet Crude (NYMEX)	30.00	29.94
Brent Crude	29.67	31.98

Source: [www.eia.doe.gov](http://www.eia.doe.gov); \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London

<b>GRAIN EXPORTS</b>
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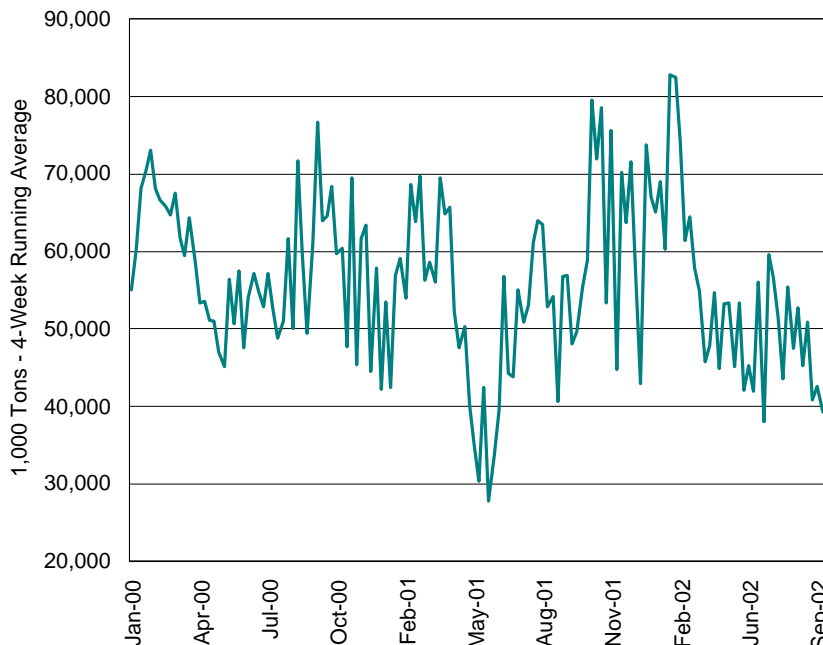
**U.S. Export Balances** (1,000 Metric Tons)

	HRW	SRW	Wheat		DUR	All	Corn	Soybean	Total
			HRS	SWW					
<u>Unshipped Export Balances</u>									
12/26/02	1,093	735	1,230	618	123	3,798	6,826	8,339	18,963
This Week Year Ago	1,220	623	948	563	118	3,472	7,347	7,821	18,640
<u>Cumulative Exports-Crop Year</u>									
01/02 YTD	4,581	1,546	4,104	2,068	518	12,818	13,037	11,347	37,202
00/01 YTD	4,895	3,403	3,239	1,902	800	14,238	13,825	17,713	45,776
99/00 Total	9,858	4,710	6,305	5,413	1,232	27,518	37,220	24,516	89,254
98/99 Total	7,387	3,645	7,864	6,105	963	25,965	44,476	24,501	94,942
97/98 Total	9,867	6,792	8,918	6,443	897	32,918	55,769	23,550	112,237

Source: Foreign Agricultural Service YTD-Year-to-Date ([www.fas.usda.gov](http://www.fas.usda.gov)) Crop Year:Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31**Select U.S. Port Regions - Grain Inspections for Export - 1,000 Metric Tons**

	<u>Pacific Region</u>			<u>Mississippi Gulf</u>			<u>Texas Gulf</u>			<u>Port Region Total</u>		
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
01/02/03	217	58	0	128	577	547	48	2	0	274	1,251	50
2002 YTD	9,196	3,999	2,801	5,595	36,655	18,645	5,926	268	992	15,996	60,895	7,186
2001 YTD	9,884	5,181	2,847	6,382	34,885	17,889	5,927	267	1,581	17,912	59,156	7,775
% of 2001 YTD	93%	77%	98%	88%	105%	104%	100%	101%	63%	89%	103%	92%
2001 Total	10,007	5,877	1,647	6,829	34,991	17,996	6,984	470	1,008	17,530	59,816	8,462

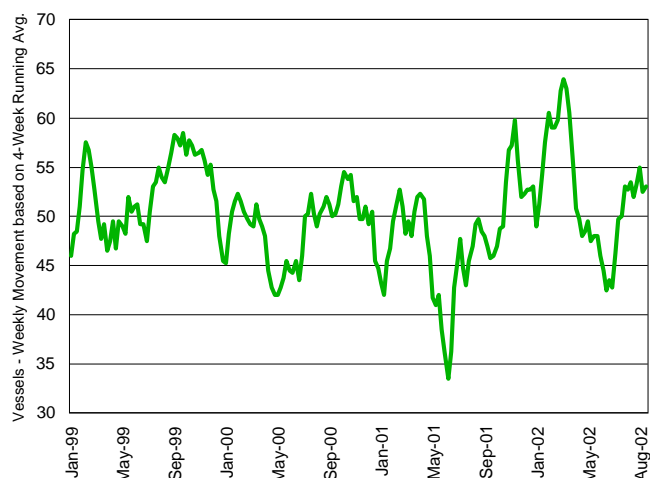
Source: Federal Grain Inspection Service YTD-Year-to-Date

**U.S. Grain Inspected for Export****Select Canadian Port Export Inspections**  
1,000 Metric Tons, Week End Summary

	Wheat	Durum	Barley
01/02/2003			
Vancouver			
Prince Rupert	97		
Prairie Direct	3	3	5
Thunder Bay			2
St. Lawrence	2,244	1,260	177
2001/02 YTD	6,164	1,352	498
2002/03 YTD	2,344	1,263	184
% of Last Year	263%	107%	270%

Source: Canadian Grains Commission, Crop Year 8/1- 7/31

### Gulf Port Region Grain Vessel Loading Past 7 Days

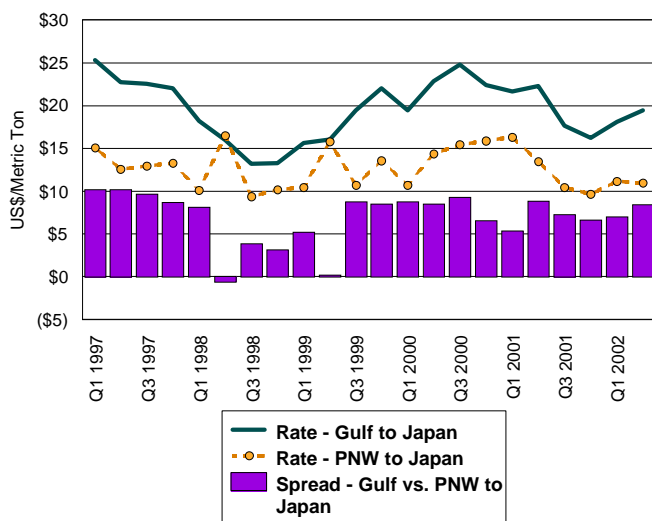


### Port Region Ocean Grain Vessels

	Gulf			Pacific Northwest	Vancouver B.C.
	In Port	Loaded 7-Days	Due Next 10-Days	In Port	In Port
12/26/02	39	44	66	11	0
01/02/03	40	46	68	7	1
2001 Range	(13..65)	(28..64)	(46..81)	(1..18)	(4..20)
2001 Avg	36	48	63	9	12

Source: Transportation &amp; Marketing /AMS/ USDA

### Grain Vessel Rates to Japan



### Quarterly Ocean Freight Rates

Average Rates &amp; Percentage Changes, U.S. Dollars/Metric Ton

	2002 3 <sup>rd</sup> Qtr	2001 3 <sup>rd</sup> Qtr	% Change		2002 3 <sup>rd</sup> Qtr	2001 3 <sup>rd</sup> Qtr	% Change
<b>Gulf to</b>				<b>Pacific NW to</b>			
Japan	\$19.54	\$17.69	9%	Japan	\$11.57	\$11.46	10%
Mexico	\$7.14	-	-				
Venezuela	-	\$13.45	-				
N. Europe	-	\$12.06	-				
N. Africa	\$31.64	\$18.21	42%	<b>Argentina to</b>			
Med. Sea	\$11.92	\$12.05	-1%	Med. Sea	\$19.93	-	-
Black Sea	-	-	-	N. Europe	-	\$16.22	-
				Japan	-	\$29.40	-

Source: Transportation &amp; Marketing/AMS/USDA; (\*) rates shown are for metric ton (2,204.62 lbs.=one metric ton)

### Ocean Freight Rates for Selected Shipments - week ending 12/21/02

Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$/Ton)
U.S. Gulf	China	Wheat	Dec. 20/30	22,000	\$126.95*
U.S. Gulf	Japan	Heavy Grain	Jan. 1/5	54,000	\$25.25
U.S. Gulf	Japan	Heavy Grain	Jan. 3/20	54,000	\$25.50
PNW	China	Wheat	Dec. 20/30	18,000	\$45.00*
River Plate, S. America	Poland	Grains	Dec. 28/30	30,000	\$26.00
Southampton, U.K.	Casablanca	Wheat	Dec. 20/24	30,000	\$12.00
Constantza, Romania	Morocco	Wheat	Dec. 18/20	25,000	\$15.50
Bedi Bunda, India	Indonesia	Wheat	Dec. 17/22	27,000	\$12.80

Source: Maritime Research Inc.; rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal. Lastly, the loading and unloading of bagged commodities are generally more labor intensive than bulk shipments, which also contributes to the additional cost.

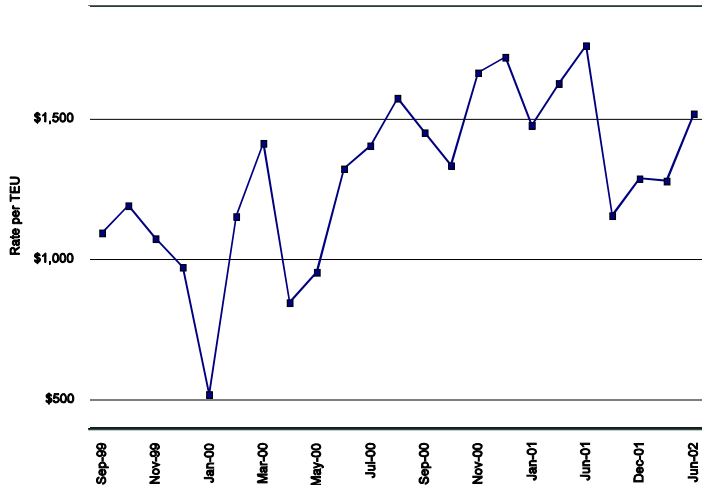
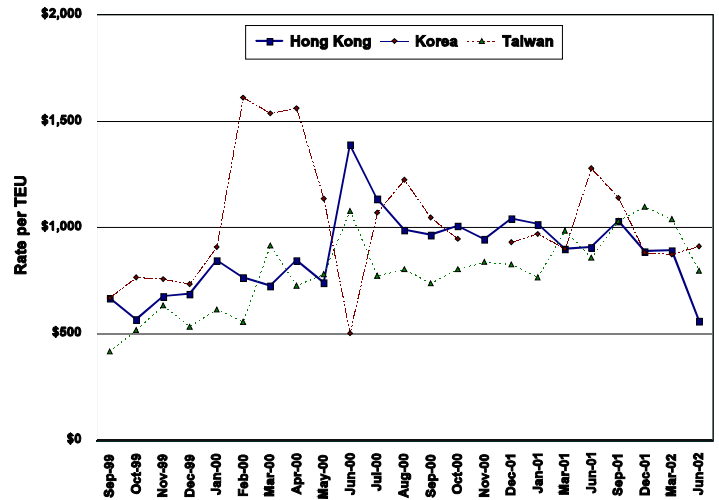


CONTAINER

**Container Ocean Freight Rates**

Monthly Weighted Averages Based on Shipping Line Monthly Mkt. Share

Source: Transportation &amp; Marketing/AMS/USDA

**Container Rates - Soybeans**  
Seattle, WA Origin to Tokyo, Japan**Container Rates - Feed Grain**  
Seattle, WA Origin to Selected Destinations

Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.